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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/798,112	03/11/2004	Stephen Rawle	00216-624001 / Case 8125	5924
26161 7590 01/18/2007 FISH & RICHARDSON PC P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022			EXAMINER PAYER, HWEI SIU CHOU	
			ART UNIT 3724	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		01/18/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

10/798,112

Applicant(s)

RAWLE, STEPHEN

Examiner

Hwei-Siu C. Payer

Art Unit

3724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 October 2006 and 31 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 11-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 11-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

## Detailed Action

The amendments filed on 10-6-2006 and 10-31-2006 have been entered.

### Claims Rejection - 35 U.S.C. 103(a)

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-5, 7, 8 and 11-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gilder et al. (U.S. Patent Application Publication No. 2002/0144404) in view of Gilder et al. (U.S. Patent No. 6,212,777) and Gooding (U.S. Patent No. 4,200,976).

Gilder et al. '404 discloses a shaving razor blade unit comprising a housing (10), a shaving surface defined by a group of parallel blades (19,20,21,22) supported by the housing (10), the blades (19,20,21,22) being mounted on support members (28) that are movable mounted on the housing (10). The shaving razor blade unit of Gilder et al. can be a three-blade shaving unit (see Fig.5) or a four-blade shaving unit (see Fig.8). In both cases, the inter-blade span (S2 and S3 for three blades, see Fig.5) and (S2,S3,S4 for four blades, see Fig.8) can be 1.11 mm (see paragraphs [0025] and [0031])

regardless the numbers of the blades, and the expose of blades between the first blade and the last blade is approximately 0 degree.

In view of this fact, one skilled in the art who wishes to provide the four-blade shaving unit (Fig.8) of Gilder et al. with an additional blade (for the purpose of adding an additional cutting surface to reduce overall shaving time) would have known to keep the inter-blade span at a constant value (i.e. 1.11 mm) as suggested by Gilder et al. Therefore, the claimed limitation of "the distance from the cutting edge of a first blade of said group to a last blade of said group being between 3.8 mm and 4.6 mm" is met (i.e.  $1.11 \text{ mm} \times 4 = 4.44 \text{ mm}$ ).

It is noted the blades of Gilder et al. '404 are each mounted on a support member (28) which is not of the claimed angled shape, and the exposure of the first and last blades is not as claimed.

Gilder et al. '777 show a blade (11) mounted on a support member (unnumbered, see Fig.2) having a blade platform portion for supporting the blade (11) and a depending base portion angled relative to the blade platform portion. The '777 reference also shows a blade unit comprising a first blade (11) having a negative exposure (EXP  $-0.04$ , see Fig.2) and a last blade (13) having a positive exposure (EXP  $+0.06$ , see Fig.2).

It would have been obvious to one skilled in the art to further modify Gilder et al. '404 by having each blade supported on a well-known angled shape blade support member such as that of '777's and by having the first blade arranged at a negative

exposure and the last blade arranged at a positive exposure to reduce the drag forces during shaving as taught by the '777 reference.

Gilder et al. '404 as modified above is silent about the blade width or length (defined as the distant from the cutting edge of the blade to the rear edge of the blade).

Gooding teaches that it is desirable to use blades of narrower width (in the range of 0.8 mm to 2.0 mm, see column 2, lines 9-14) in a shaving unit to facilitate the passage of cut hair and shaving soap through the shaving unit, to afford a greater blade tangent length and greater angle of blade inclination, and to accommodate a greater number of blades for a given width of the shaving unit.

In view of this teaching, it would have been obvious to one skilled in the art at the time this invention was made to further modify Gilder et al. '404 by having the blade's width in the range of less than 1 mm depending upon the number of blades that is to be accommodated in a given width of the shaving unit.

Regarding claims 2-3 and 18-20, it is well known in the art that the length of the inter-blade span and thickness of the blade support member affect the overall size and the rinsing efficiency of the blade unit. Therefore, it would have been obvious to one skilled in the art to further modify Gilder et al. '404 by selecting a desirable range for the blades distance and a desirable thickness for the blade support member to be accommodated in a given size of the blade unit and yet not to jeopardize the rinsing efficiency thereof.

3. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gilder et al. (U.S. Patent Application Publication No. 2002/0144404), Gilder et al. (U.S. Patent No. 6,212,777), and Gooding (U.S. Patent No. 4,200,976) as applied to claim 1 above, and further in view of Trotta (U.S. Patent No. 4,407,067).

Gilder et al. '404 as modified shows all the claimed structure except it is silent about the range for the blade tangent angle.

Trotta shows a razor unit comprising a group of blades (40,44) each having a blade tangent angle of between 21 to 22 degrees (see Abstract).

It would have been obvious to one skilled in the art to further modify Gilder et al. '404 by having the blades at a tangent angle of between 21 to 22 degrees to achieve a closer and safer shave as taught by Trotta.

#### **Remarks**

Applicant's arguments with respect to claims 1-8 and 11-17 have been considered but are moot in view of the new ground(s) of rejection.

#### **Point of Contact**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hwei-Siu C. Payer whose telephone number is 571-272-4511. The examiner can normally be reached on Monday through Friday, 7:00 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer Ashley can be reached on 571-272-4502. The fax phone numbers for the organization where this application or proceeding is assigned are 571-273-8300 for official communications and 571-273-4511 for proposed amendments.

H Payer  
January 4, 2007



H Payer  
Primary Examiner